

NWS FORM E-5
(11-88)
(PRES. BY WSOM E-41)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

HYDROLOGIC SERVICE AREA (HSA)

WFO Jackson, Mississippi

MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS

REPORT FOR:

MONTH

YEAR

September

2002

TO: Hydrometeorological Information Center, W/OH2
NOAA / National Weather Service
1325 East West Highway, Room 7230
Silver Spring, MD 20910-3283

SIGNATURE

Alan Gerard, MIC
In Charge of HSA

DATE

October 10th , 2002

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOME-41)

September was a month of extremes within the HSA. The first two thirds of the month were characterized by drier than normal weather. Only widely scattered showers were observed. Moderate drought conditions prevailed over east and southeast Mississippi, Lower Yazoo delta, the Big Black river basin, and northeast Louisiana. The final third of the month was characterized by extremely wet conditions, effectively ending the short term drought conditions over the HSA.

A weak frontal system pushed through the area from September 20th to the 23rd. The highest 1 day rainfall totals for this event were 3.40 inches at Lake Providence, LA; 3.40 inches at Carthage, MS; 2.92 inches at Crandall, MS and 2.89 inches at Stoneville, MS.

The most significant event during the month was the heavy rainfall from Tropical Storm Isidore. Heavy rainfall entered south and southeast portions of Mississippi, the Pearl River basin, and lower portions of the Tombigbee basin from late afternoon on September 24th into the 25th. Heavy rainfall pushed into the western sections of Mississippi and the Lower Yazoo River basin late on the 25th until late on the 26th. Rainfall amounts dropped off sharply west of the Mississippi River. The 60 hour rainfall totals in Mississippi ranged from 2.50 to near 10 inches. Heaviest 60 hour rainfall amount for Isidore were 9.68 inches near Grenada, MS; 9.27 inches at Brooklyn, MS; 8.70 inches southeast of Kosciusko, MS; 8.70 inches at Pelahatchie, MS; 8.40 inches at Ethyl, MS and 8.37 inches at Winona, MS. Rainfall amounts were sharply lower west of the Mississippi River where general rainfall amounts from .50 to 3.00 inches were reported. See attached Map for Isidore rainfall.

For the first two thirds of the month, soil moisture was near normal over the HSA; however, below normal soil conditions prevailed in extreme east and southeast areas and the lower Yazoo Delta, the Big Black River basin, and northeast Louisiana. Even with Isidore dumping 6 to 9 inches over the Pascagoula River system in southeast Mississippi, only moderate rises in the rivers occurred. No mainstem river flooding was observed. After Isidore, soil moisture was above normal over all of Mississippi, and near normal over northeast Louisiana and southeast Arkansas. River flooding was observed on the Big Black River, Pearl River, Yockanookany River,

Tuscolameta Creek, and the Yalobusha River. See September E-3 report for information on flood crests. Rainfall for the month of September:

<u>RIVER BASIN</u>	<u>RAINFALL</u>	<u>DEPARTURE FROM NORMS</u>
<i>Southeast Arkansas (Chicot & Ashley counties)</i>	<i>2.50 to 4.50 inches</i>	<i>Above normal over Chicot. slightly below to near normal over Ashley.</i>
<i>Northeast Louisiana (Tensas, Boeuf, Bayou Macon & Lower Ouachita)</i>	<i>3.00 to 7.00 inches northern sections</i> <i>2.75 to 9.00 inches central sections</i> <i>2.00 to 7.50 inches southern section</i>	<i>Near Normal to much above normal over east sections.</i> <i>Near normal to much above normal over east sections.</i> <i>Below normal to much above normal over east sections.</i>
<i>Lower Yazoo</i>	<i>6.00 to 12.00 inches</i>	<i>Much above normal.</i>
<i>Big Black</i>	<i>7.00 to 10.00 inches upper and middle sections.</i> <i>7.00 to 12.00 inches lower sections</i>	<i>Much above normal.</i> <i>Much above normal.</i>
<i>Homochitto/ Bayou Pierre</i>	<i>9.00 to 12.00 inches</i>	<i>Much above normal.</i>
<i>Pearl (abv Jackson)</i>	<i>7.00 to 12.00 inches</i>	<i>Much above normal.</i>
<i>Pearl (Blo Jackson)</i>	<i>8.00 to 11.50 inches</i>	<i>Much above normal.</i>
<i>Pascagoula</i>	<i>8.00 to 12.50 inches over the Leaf basin.</i> <i>11.50 to 15.50 inches over the Black Creek basin.</i> <i>7.00 to 12.00 inches over the Chickasawhay</i>	<i>Much above normal.</i> <i>Much above normal.</i> <i>Much above normal.</i>
<i>Tombigbee and tributaries in the JAN HSA</i>	<i>7.50 to 10.00 inches</i>	<i>Much above normal.</i>

The heaviest rainfall amounts in the HSA for the month were: 15.89 inches at Brooklyn, MS; 12.74 at Crandall, MS; 12.35 inches at Hattiesburg, MS; 11.89 inches at Carthage, MS; 11.60 inches at Walnut Grove, MS; 11.60 at Purvis, MS; 11.27 inches at Collins, MS; 11.12 inches at Sumrall, MS; 10.78 inches at Doddsville, MS; 10.69 at Satartia 10SW, MS; 10.69 at Brookhaven, MS.

Here at the WFO Jackson, the September monthly rainfall was 9.62 inches, which was 6.39 inches above normal. Ending September 30st, we have had 50.77 inches of rain thus far this year, which is 8.62 inches above normal.

At the Meridian Airport, the September monthly rainfall was 10.78 inches, which was 7.14 inches above normal. Ending September 30th, Meridian has had 36.35 inches of rain thus far this year, which is 8.76 inches below normal.

The Mississippi River from Arkansas City, AR to Natchez, MS began the month with a rise and began to fall sharply to a low at mid month. The last half of the month saw moderate rises. The river at Arkansas City and Greenville was above seasonal norms for the first few days of the month; however, for the remainder of the month, the river remained below seasonal norms. At Vicksburg and Natchez, the river was above seasonal norms during the first and final third of the month; however, it was below seasonal norms during the middle third of the month. The provisional high and low stages for September are listed below:

Location	High Stage(ft)	Date	Low Stage(ft)	Date
Arkansas City, AR	7.03	09/03	0.90	09/18
Greenville, MS	18.26	09/03	11.91	09/18
Vicksburg, MS	11.35	09/04	4.36	09/19
Natchez, MS	18.37	09/28	11.10	09/21

Total Flood Warning products issued: 12

Total Flood Statement products issued: 49

Daily Rainfall Products (RRA'S) issued 30

Daily River Forecast Products (RVS'S) issued 32

Daily River Stage products (RVA'S) issued 30

Marty V. Pope
Service Hydrologist

Note: Stage and precipitation data was furnished with cooperation from Mississippi, Louisiana, and Arkansas, N.W.S. Cooperative Observers, United States Geological Survey, United States Army Corps of Engineers and the Pearl River Valley Water Supply District, Pat Harrison Waterway District, and the Mississippi Department of Environmental Quality.

cc: USGS Little Rock District
USGS Ruston District
USCE Mobile District
USCE Vicksburg District
USCE Mississippi Valley Division
USGS Mississippi District
SRH Climate, Weather and Water Division
LMRFC
Pearl River Valley Water Supply District
Hydrologic Information Center
Southern Region Climate Center
Pat Harrison Waterway District